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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,171	03/24/2005	Shigeru Ishizawa	268521US26PCT	4326
22850 7590 06/28/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER PATEL, REEMA	
			ART UNIT 2812	PAPER NUMBER
			NOTIFICATION DATE 06/28/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

**Application No.**

10/529,171

**Applicant(s)**

ISHIZAWA ET AL.

**Examiner**

Reema Patel

**Art Unit**

2812

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/5/05</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) was submitted on 8/5/2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-9 and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Lowrance (U.S. 2002/015986 A1).

5. Regarding claim 1, Lowrance discloses a method for transferring an object to be processed in a processing apparatus, the method comprising:

- A plurality of carrying steps of sequentially transferring the object from one chamber to another among the process chambers ([0026]),

- Wherein one pick (112A, Fig. 1) is used in carrying steps till right before the object is loaded into a specified process chamber, and a second pick (112B, Fig. 1) is used in a carrying step of loading the object into the specified process chamber and any subsequent carrying step for the object ([0027]).

6. Regarding claim 2, Lowrance discloses a delivery step of conveying the object between picks including the steps of placing the object on a buffer mechanism (118, Fig. 1) by the one pick and moving the other pick to pick the object placed on the buffer mechanism ([0027]).

7. Regarding claim 3, Lowrance discloses a method for transferring an object to be processed in a vacuum processing apparatus, the method comprising:

- A plurality of carrying steps in which the object is sequentially transferred from one chamber to another among process chambers, wherein one pick of the two picks is used in carrying steps till right before the object is loaded into the specified process chamber, and the other pick of the two picks is used in a carrying step of loading the object into the specified process chamber and any subsequent carrying step for the object ([0026]-[0027]);
- A delivery step of conveying the object from the one pick to the other pick by employing the buffer mechanism ([0027]).

8. Regarding claim 4, Lowrance discloses a method for transferring an object to be processed in a processing system, the method comprising:

- A plurality of carrying steps in which the object is sequentially transferred from one chamber to another among the process chambers, wherein one pick of the two picks is used in carrying steps till right before the object is loaded into a specified process chamber and any subsequent carrying steps for the object ([0026]-[0027]);
- A delivery step of conveying the object from said one pick to the other pick by employing a buffer mechanism ([0027]).

9. Regarding claim 5, Lowrance discloses at least two object supporting mechanisms (118, Fig. 1) for supporting the object are provided in the pass portion wherein the object is supported by one of the object supporting mechanisms before being loaded into the specified process chamber and the object is supported by another object supporting mechanism after being processed in the specified process chamber ([0027]).

10. Regarding claim 6, Lowrance discloses the following:

- The pass portion is provided with a gate valve ([0006], [0024]).
- Each of the process chambers is provided with a gate valve ([0028]), wherein when the gate valve of the pass portion is closed, only one of the gate valves of process chambers connected to each common transfer chamber which is isolated by the pass portion is selectively opened; and when the gate valve of the pass portion is opened, only one of the gate valves of process chamber connected to common transfer chambers

which communicate with each other by the pass portion is selectively opened ([0006]).

11. Regarding claim 7, Lowrance discloses the delivery step includes the steps of placing the object on the buffer mechanism by one pick and moving the other pick to pick the object placed on the buffer mechanism ([0027]).

12. Regarding claim 8, Lowrance discloses the number of transfer ports (136, Fig. 1) is two, one of the transfer ports being used exclusively for loading and the other transfer port being used exclusively for unloading ([0024]).

13. Regarding claim 9, Lowrance discloses the following:

- Load lock chambers are connected to the two transfer ports via gate valves ([0006]).
- A loading transfer chamber (104; Fig. 1) provided with a loading carrying mechanism having two picks is connected in common to load lock chambers via gate valves (Fig. 1; [0028]);
- Wherein one pick of the loading carrying mechanism is used when the object is loaded from the loading transfer chamber to the load lock chambers and the other pick of the loading carrying is used when the object is unloaded from the load lock chambers to the loading transfer chamber ([0026]-[0027]).

14. Regarding claim 11, Lowrance discloses the delivery step includes the steps of placing the object on the buffer mechanism by one pick and moving the other pick to pick the object placed on the buffer mechanism ([0027]).

15. Regarding claim 12, Lowrance discloses the number of transfer ports (106, Fig. 1) is two, one of the transfer ports being used exclusively for loading and the other transfer port being used exclusively for unloading ([0024]).

16. Regarding claim 13, Lowrance discloses the following:

- Load lock chambers are connected to the two transfer ports via gate valves ([0006], [0024]).
- A loading transfer chamber provided with a loading carrying mechanism having two picks is connected in common to load lock chambers via gate valves (Fig. 1; [0028]).
- The other pick of the loading carrying mechanism is used when the object is unloaded from the load lock chambers to the loading transfer chamber ([0027]).

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 10, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowrance (U.S. 2002/015986 A1) as applied to claims 1, 3, and 4 above, respectively.

19. Regarding claims 10 and 14-15, Lowrance discloses that the process chambers can perform various processing steps to the substrate object to be processed,

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specifically chemical or physical vapor deposition ([0005]). Yet, Lowrance does not explicitly disclose that the process chamber carries out the step of depositing a metal film. However, the examiner takes Official Notice that the process of depositing metal film in chambers designed for chemical or physical vapor deposition is well known in the art (see for example, Masterson (U.S. 6,602,793 B1), col 1, lines 12-16). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process chamber in the invention of Lowrance to deposit a thin metal film on the object to be carried.

### ***Conclusion***

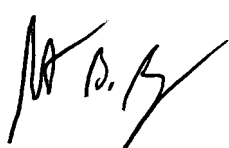
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reema Patel whose telephone number is 571-270-1436. The examiner can normally be reached on M-F, 8:00-4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lebentritt can be reached on 571-272-1873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RSP  
6/20/07

SCOTT B. GEYER  
PRIMARY EXAMINER

 6/20/07